Census
The past, present and future

Background

The Census takes place on one day in each decade when information is collected about all the people living or staying in every household in the country. The purpose is to build a full and reliable snapshot of how people live in our complex and rapidly changing society. The information collected includes data on age, gender, migration, education, marital status, health, housing conditions, family structure, employment and travelling habits.

In England and Wales, the Census is planned and carried out by the Office for National Statistics. Elsewhere in the UK, responsibility rests with the General Register Office for Scotland and the Northern Ireland Statistics and Research Agency. It is a legal requirement for every household to fill in the Census form.

A short history of the Census

The first known Census was taken by the Babylonians over 5000 years ago and there are also records of population counts by the ancient Egyptian and the Persians and biblical accounts of Censuses by the Israelites and the Romans. Today over 200 countries in the world carry out a regular Census.

In Britain the first inventory of land and property was recorded in the Domesday Book in 1086. In 1279 a more detailed picture of rural society, including the size of holdings by freemen and serfs, was provided by the Hundred Rolls. This information has been a goldmine for economic and social historians ever since.

The first official Census in Britain in 1801, (which recorded a population of ten million), was taken by officials using only pens and paper. It was not until 1841 that the Census was filled in by householders on a certain day. However, since then the Census has been conducted every ten years, with the exception of 1941 during the Second World War. The 2001 Census cost approximately £255 million for the UK as a whole and the cost of the 2011 Census is expected to amount to £482 million over ten years - equivalent to 77p per person a year.
The United Nations Statistics Division issues standards and methods to assist national authorities to plan and collect population and housing data. The Census in the UK is a national count of the population through the completion of forms delivered door to door. The questions relate to the household and the people living or staying there on a specific date — Census Day.

The 2001 Census covered an estimated 59 million people in 33 million households asking 41 questions. By comparison the first Census held in 1801 asked only five questions of ten million people in two million households.

Until 2001 the forms were delivered by enumerators (a person used to perform door-to-door delivery and collection of Census papers employed by the Office for National Statistics). The forms were designed to be fed through high-speed scanning machinery, which captured all the ticked responses and held written answers in digital form. This digital data was then transferred to microfilm to be kept in conditions of strict confidentiality for 100 years. The paper forms were pulped and recycled.

The 2011 Census was the first where it was not the actual counts that were released but estimates based on them (the so-called One Number Census that fed directly through into the annual population estimate for 2001), with missing people and households being estimated using other information sources, notably the follow-up Census Coverage Survey.

In response to recent technological developments and an increasingly mobile population, some major changes were introduced to the 2011 Census. For the first time 95 per cent of Census forms were delivered by post and people were able to return the completed forms online.

Other innovations included:
- The development of a central address register in collaboration with Royal Mail and local government to improve form delivery and field management;
- New questions on national identity, citizenship, second residence, language, civil partnership status and (for non-UK born) date of entry into the UK and length of intended stay;
- All standard outputs will be publicly accessible online and free of charge, from the National Statistics website.

Choosing the Census questions

During the period between censuses, a number of consultations and tests are carried out to examine the feasibility of changing topics and methods of collecting data. In 2005 the consultation resulted in a far larger demand for questions than would be possible to include on a Census form of a reasonable size.

The criteria used for topics covered by the Census are:
- They must be those most needed by the major users. For instance, they should be relevant to allocation of resources or improving services or policy development;
- They must be expected to produce reliable and accurate data. For example, a key benefit of census data is the ability to analyse particular variables against one another. Answers from individuals and families can thus be combined to provide valuable information on the number and characteristics of households and families of different types — such as, for example, the number of single-parent families where the parent is employed and the children are under school age.
Does the Census still work well?

Feedback from the 2001 Census revealed an average response in England and Wales of 94 per cent, which is higher than any other surveys conducted by ONS. However there were some worrying localised variations and a few local authority areas had rates below 70 per cent. The promotion of the 2011 Census therefore paid particular attention to groups who had been least likely to return their questionnaires.

Tailored campaign messages were used to reach:
- Young adults
- Students
- People over 80
- Some black and minority ethnic communities
- Unemployed people
- Families with pre-school children

The future of the Census

In order to reduce costs, the Government has asked the ONS to explore alternative methods of producing the core outputs of the Census. The three-year ‘Beyond 2011’ Programme was launched in October 2011 to examine options for producing detailed information about small areas and neighbourhoods.

The range of alternatives to the current Census collection system include the greater use of administrative data sources like NHS records, pension lists, HMRC tax records, school lists, and higher education statistics. However there is a possibly big hurdle to overcome in relation to the public acceptability of linking all these data sets in Big Brother fashion. Other options are a short form census, a rolling programme of census data collection, an enhanced programme of government surveys or simply continuing the conventional Census.

The Census and social science

Both ESRC and the British Academy have warned the Beyond 2011 consultation that ending the Census in its current form could have serious implications for academic research. They argue that the extremely large sample size and coverage of the current format is an invaluable and unique resource. The value of the Census data on the health and social circumstances of the contemporary population, especially of small groups, is of particular interest to social scientists seeking to understand how society is changing over time.
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The ESRC Census programme
The ESRC-funded Census Programme provides data and seven data support services to allow users in UK Higher and Further Education institutions to access the four UK censuses since 1971. An online registration service ensures easy access for academic users to a range of census data products.

The programme launched a Census Portal service in July 2007, which includes online resources and guides for census users. The portal will continue to develop with the addition of increasingly detailed searchable information about the census data resources and an ongoing range of training events.

The major data series covered by the ESRC programme are:

- Census area statistics (CAS) are counts drawn from geographical units of which the smallest are census output areas of about 125 households (in England and Wales).
- Digital boundary data (DBD) are computer representations of the coordinates of the boundaries of the geographical areas for which census data are published.
- Interaction data describe flows of people between places. One set describes journeys to work within and between all areas, and a second set describes migration flows, based on the census question concerning usual address one year prior to the census.
- Samples of anonymised records (SARs) provide anonymised records for large samples of households and individuals data
- The ONS Longitudinal Study (ONS LS) is a major project to link a sample of full census records between the censuses 1971-2001 and other major events in the lives of sample members.
- The Scottish Longitudinal Study (SLS) links the 1991 and 2001 censuses for Scotland together with vital events and health data.
- The Northern Ireland Longitudinal Study (NILS) is a new dataset, containing records from the 2001 census linked to vital events and health data, representing a 28 per cent population sample for Northern Ireland.

Details of the university departments supporting these data units are available at www.census.ac.uk
Some examples of research using Census data

Why do young adults find it hard to fly the nest?

With many young adults living with their parents into their twenties and thirties, researchers at the ESRC Centre for Population Change are using Census and other data to find out what makes young people decide to leave or come back to the parental home. The study will also look at how living together affects the economic, social and mental wellbeing of parents and grown-up children. They also hope to find out how co-residence patterns for Britain compare with other countries, and what parents can do to help young people leave home.

Are poor people more at risk in flooding emergencies than the affluent?

Dr Jane Fielding, University of Surrey, used a combination of flood map data from the Environment Agency and the Census to examine social inequality and flood emergencies in coastal areas and flood plains. She found clear evidence that flooding was not an indiscriminate social leveller. There was marked inequality in the distribution of flood risk in England and Wales where, in some areas, more deprived groups were at greater flood risk than more affluent householders. The differences were particularly marked in the tidal flood plains of East Anglia and the North East, possibly because of the number of people retiring to the sea. The research points out that the overall cost of flood emergencies is underestimated because those on low income are less likely to be insured.

What happens when international migrants settle?

University of Leeds Professor Philip Rees investigated childbearing patterns among recent migrants to find out how differences in ethnic fertility and mortality shape current and future population trends and how international migration and internal migration affect the size and ethnic composition of local populations. The Leeds study suggested the population is also set to become more racially diverse as well as less segregated over the coming years. At a regional level, ethnic minorities will shift out of deprived inner city areas to more affluent areas, which echoes the way white groups have migrated in the past.

Help shape local education

Because every penny counts, it’s important that you let us know what your community really needs by filling in your census when it arrives in March.